

ROPES OF SINGLE WALL CARBON NANOTUBES

ABSTRACT OF THE DISCLOSURE

This invention provides a method of making single-wall carbon nanotubes by laser vaporizing a mixture of carbon and one or more Group VIII transition metals. Single-wall carbon nanotubes preferentially form in the vapor and the one or more Group VIII transition metals catalyzed growth of the single-wall carbon nanotubes. In one embodiment of the invention, one or more single-wall carbon nanotubes are fixed in a high temperature zone so that the one or more Group VIII transition metals catalyze further growth of the single-wall carbon nanotube that is maintained in the high temperature zone. In another embodiment, two separate laser pulses are utilized with the second pulse timed to be absorbed by the vapor created by the first pulse.

09722950-112700